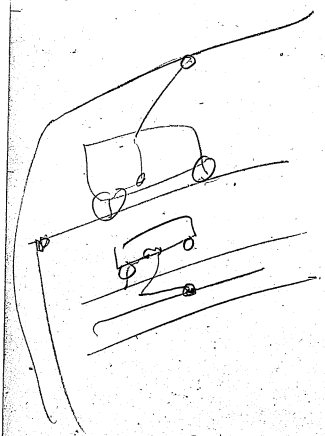
Notebook, N-92-04-28

This notebook covers the period April-May 1892. At the beginning of the book are 6 pages of undated drawings by Edison regarding the electric railway. The remainder of the book contains notes and drawings by John Ott and an unidentified experimenter relating to lamp tests. The pages are unnumbered. Approximately 30 pages have been used.

(× E-172) N-92-04-28



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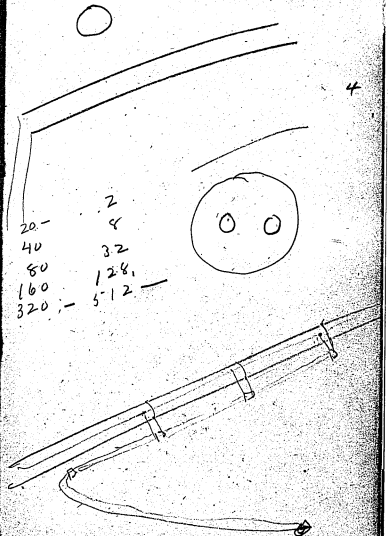
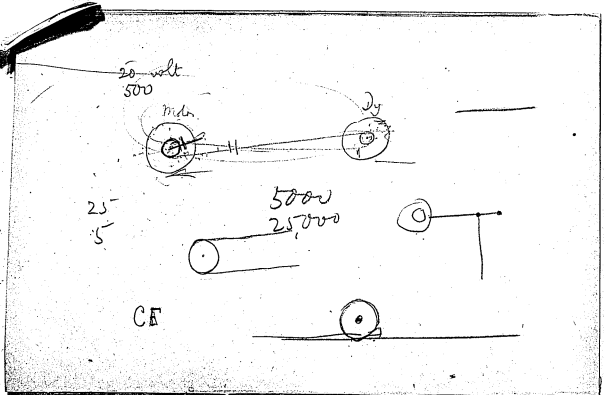
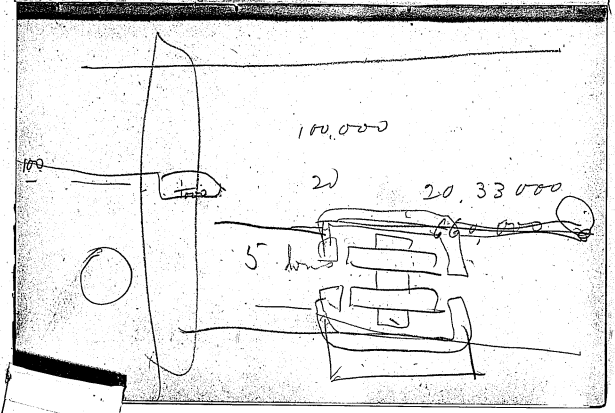
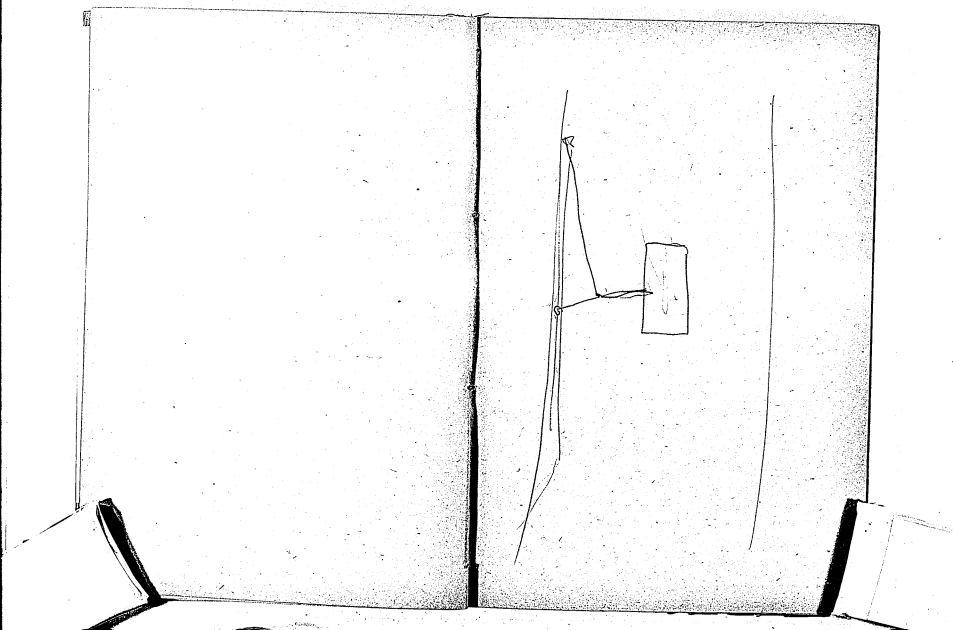
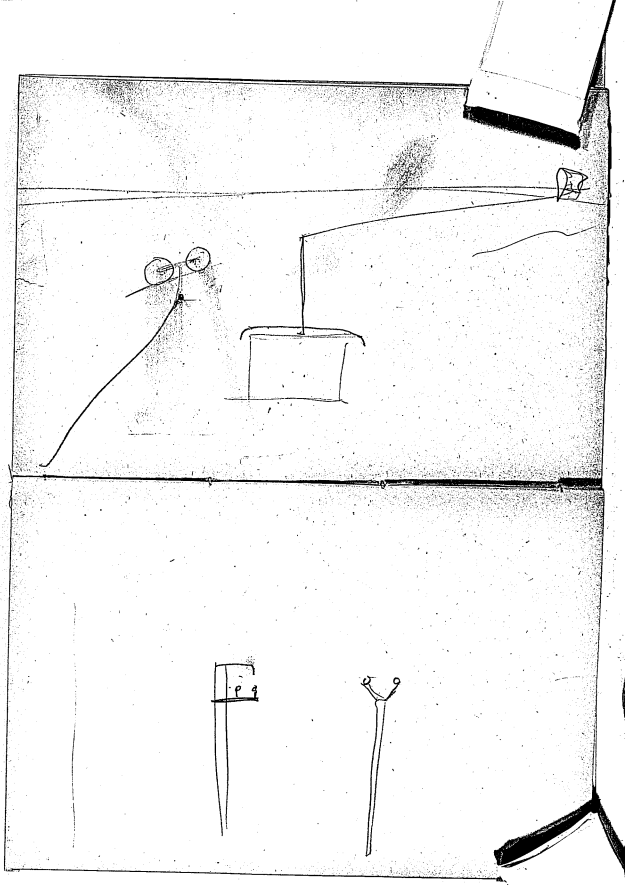


ΔM
γ=
2

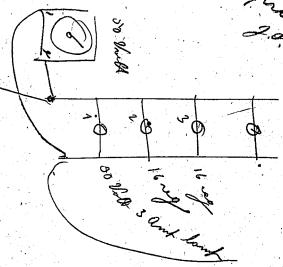

20 volt
500
25
5
5000
25,000
CE


100,000
100
20
20, 33 000
5

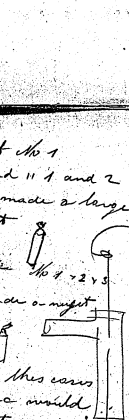




April 28
J. F. Osk. '92



First No 1
Second " 1 and 2
this made a large
night



in all these cases
the arc would
not stand
Changed the flow of gas
Changed the speed of motor

October 28.92

2 .50 Volt lamp
3 .16 reg "
Changed flowing of gas
" speed of motor
are both wounded
not motor
field
By reversing the
are the Dynamo
dropped 10 volts

2 .50 Volt are brake
4 .16 reg " "
3 .50 " " "
4 .16 " " "
3 .50 " " "
5 .16 " " "
4 .50 " " "
5 .16 " " "
4 .50 " " "
6 .16 " " "
8 .50 " " "
7 .16 " " "
2 .50 " " "
8 .16 " " "
1 .50 " " "
9 .16 " " "
Grate coal was taken to
change the flow of Gases, and
change speed of Motor
10 .16 " " "

Motive Force changed to 60 Volts

10	16	neg	arc	broke
1	16	"	"	"
1	50	Volt	"	"
1	50	"	"	"
2	16	neg	"	"
1	50	"	"	"
3	16	neg	"	"
2	50	"	"	"
3	16	neg	"	"
2	50	"	"	"
4	16	neg	"	"
2	50	"	"	"
5	16	"	"	"
2	50	"	"	"
6	16	"	"	"
2	50	"	"	"
7	16	"	"	"
2	50	"	"	"
8	16	"	"	"
3	50	"	"	"
7	16	"	"	"
4	50	Volt	arc	broke
6	16	"	"	"
5	50	"	"	"
5	16	"	"	"

Motive Force changed to 70 Volts

2	16	neg	arc	broke
1	50	Volts	"	"
3	16	"	"	"
1	50	"	"	"
2	50	"	"	"
3	16	"	"	"
2	50	"	"	"
4	16	"	"	"
3	50	"	"	"
5	16	"	"	"
3	50	"	"	"
6	16	"	"	"
2	50	"	"	"
7	16	"	"	"
2	50	"	"	"
8	16	"	"	"
9	50	"	"	"
1	50	"	"	"

Motor Power to 80 volts

2 . 16 volts are broken
1 . 5-0 " " "
3 . 16 " " "
1 . 5-0 " " "
5 . 16 " " "
1 . 5-0 " " "
7 . 16 " " "
1 . 5-0 " " "
9 . 16 " " "
1 . 5-0 " " "
8 . 16 " " "
2 . 5-0 " " "

Electromotive force to 90 volts

2 . 16 mg are broken

4 . 16 . are holds for about 2½ minutes
Carbons very thick

16
16
16
16
16
16

April 28/892 #1

4 amps assist lamps at 91 volts

April 28/892 #2

5 amps assist lamps at 91 volts

April 28/892 #3

2 amps 3 series lamps assist at 95 volts

April 28/892 #4

3 amps 3 series lamps assist at 95 volts

April 28/892 #5

3 amps 3 series lamps assist at 100 volts
Change of volts 1½ high volts arc

April 28/892

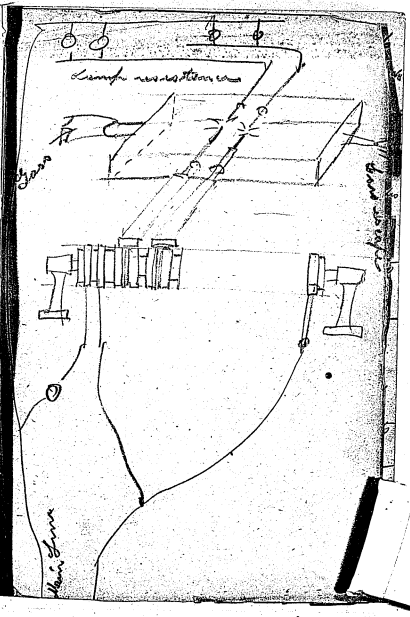
4 amps 3 series lamps will not hold arc at 100 volts

April 28/892

4 amps 3 series lamps will not hold arc at 100 volts

April 28/892 #6

2 amps 2 series lamps assist 100 volts without arc. volts arc 99 volts



April 29/892 #7

8 lamps in series 1 lamp in multiple
which not held are only for about 2 inches
motive Power at 105 volts, with arc
stands 106 volts, amperes from $\frac{8}{100}$ to $\frac{4}{100}$

April 29/892 #8

2 lamps in series 1 lamp in multiple
which not held are only for about 1/2 inches
motive Power at 106 volts without arc
stands at 105 volts with arc
amperes very unsteady run from $\frac{0}{100}$ to
$\frac{4\frac{1}{2}}{100}$

April 29/892 #9

2 lamps in series 2 lamps in multiple
which not held are only for about 2 in
motive Power at 106 volts without arc
with arc running from 98 to 103 volts
amperes run from $\frac{8}{100}$ to $\frac{0}{100}$

April 29/892 #10

3 lamps in series 1 multiple held are
for about 3" carbons very smooth
motive Power 110 volts without arc
with arc 111 volts amperes run from $\frac{8}{100}$
to $\frac{0}{100}$

April 29/892 #11

2 lamps in series 1 amph holds are for about 2 inches motive Power 110 volts without arc with arc 111 & 111½ volts amperes running from $\frac{2}{100}$ $\frac{2\frac{1}{2}}{100}$ to $\frac{3}{100}$

April 29/892 #12

2 lamps amph resist holds are for about 2½" motive Power 110 volts with out arc with arc 111¾ volts amperes running from $\frac{1\frac{1}{2}}{100}$ to $\frac{3}{100}$

April 29/892 #13

2 lamps amph 3 series resist holds are for about 3" motive power 115 volts without arc about same with arc amperes running from $\frac{2}{100}$ to $\frac{2}{100}$ + $\frac{3\frac{1}{4}}{100}$

April 29/892 #14

1 lamp amph 2 series resist holds are for about 2½" motive Force 114 volts no change with or without arc in volts amp running from $\frac{1\frac{1}{2}}{100}$ to $\frac{2}{100}$

April 29/892 #15

2 amph resist motive Force 114 volts with or without arc amp from $\frac{1}{100}$ to $\frac{2}{100}$

April 30/892 #16

1 lamp amph 3 series motive Force 121 volts with arc or without arc amperes running from $\frac{1\frac{1}{2}}{100}$ to $\frac{3}{100}$ holds are for about 2½" Carbon very smooth but quite some lamp black

April 30/892 #17

1 lamp amph 2 series motive Power 121 volts without arc with arc 122½ volts amperes running from $\frac{2}{100}$ to $\frac{3}{100}$ holds are for about 3"

April 30/892 #18

2 lamps amph resist motive Power 120 volts without arc with arc 122" amperes running from $\frac{1}{100}$ to $\frac{2\frac{1}{2}}{100}$ holds are for about 2½"

May 2 1892 #19

1 lamp multiple 3 series motor Power without arc 130 volts with arc 126 volts amperes running from 1/100 to 3/100. arc breaks about 1½"

May 2 1892 #20

1 lamp multiple 2 series motor Power 130 volts without arc with arc 125 volts amperes 3½/100 to 5½/100 holds arc for about 2½"

May 2 1892 #21

2 lamps multiple series motor Power 130 volts amperes running from 4/100 to 7/100 holds arc about 2½".

May 3 1892 #1 L

carbon made with 104 volts motor Force. 2.16 c lamps multiple series carbon cut 2⅝" each side. Exhausted measures at 16 c 64½ volts 91/100 of amp

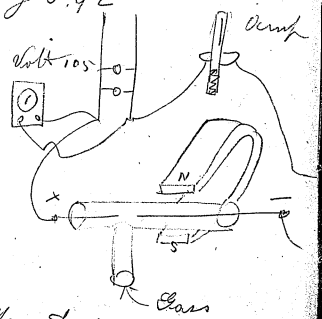
May 4 1892 #2 L

carbon made with 104 volts motor Force. 2.16 c lamps multiple series carbon cut 2½" long on each side run down on same then given one treatment measures at 16 c 51½ volts Point 90

May 4 1892 #3 L

carbon made with 104 volts motor Force. 2.16 c lamps multiple for series carbon cut 2½" each side then treated with one treatment of Benzine measures 54½ volts Point 104 at 16 c

May 5. 92



Magnets to stop vibration

May 9/892 # 4 L

Carbon made with 105 volts motive force 2.16 C lamp in multiple for moist cut of carbon 2½" each side measures 87 volts amp 1.10

May 9/892 # 5 L

carbons made & cut same as above measures 60 ¾ volts amps 1.15½

May 10/892 # 6 L

Carbons made & cut this same as above measures 6 2¼ volts 1.10 Point

May 16/892 # 7 L

Carbons cut 2½" each side made with 100 volts motive force thru lamp black burned off & lamps exhausted measure at 16 C

56¼	amp
33	"
86	"
	98½

May 21/892

4 lamps made with 100 volts motive force carbons cut 2½" each side. Then burnt off & exhausted measures at 16 c

volts	amps
57	.97½
57¼	.93
56½	.93
55	.98½

May 23/892

4 lamps made with carbons drawn through & alcohol flame one then exhausted first test as follows

	volts	amps
#1	59¼	1.01
" 2	59¾	1.01
" 3	58¾	1.00
" 4	59¼	1.02

cut of these carbons are 2½" each side

May 23/892

3 lamps made with painted carbons exhausted & drawn through the fire the 2d time cut of these carbons are 2½" each side

2d test as follows

	volts	amps
#1	57¼	.98¼
" 2	57¾	.99½
" 3	57½	.99¼

May 23/892

3 lamps made with painted carbons exhausted & drawn through the fire the 3d time cut of carbons 2½" each side

3d test as follows

	volts	amps
#1	57¼	.98
" 2	58¼	.98
" 3	58	.98